CLAIMS

1. Apparatus for providing telephone connection between one or more cellular radio telephones and a fixed cellular radio switching system, comprising a moveable cellular system, a fixed cellular radio switching system, and a tracking radio link providing radio connection between the moveable cellular switching system and the fixed cellular switching system, the moveable cellular system comprising a moveable telephone switching system connected to one or more base transceiver stations for providing radio connection with the cellular radio telephones, and having means for initiating a control call over the tracking radio link to the fixed cellular radio switching system in response to the detection of the presence of a cellular radio telephone in the area of coverage of the moveable cellular switching system, and the fixed cellular radio switching system having registration means responsive to such control calls to indicate to other switching systems that calls to a cellular radio telephone currently served by the moveable switching system should be initially directed to the fixed cellular radio switching system, the fixed cellular radio switching system also having call diversion means responsive to such control calls to allow incoming calls directed to the cellular radio telephone to be diverted to the moveable cellular switching system by way of the tracking radio link.

2. Apparatus for providing telephone connection between one or more cellular radio telephones and a fixed cellular radio switching system, the apparatus comprising a moveable cellular radio switching system for providing a radio connection with the cellular radio telephones, and a tracking radio link for providing radio connection between the moveable cellular system and a fixed cellular radio switching system, wherein the moveable cellular switching system has means for initiating a call over the tracking radio link to the fixed cellular radio switching system in response to the detection of the presence of a cellular radio telephone in the area of coverage of the moveable cellular switching system, means for transmitting data relating to the cellular radio telephone to the fixed cellular radio switching system, and means to receive calls directed to the cellular radio telephone by way of the tracking radio link and route them to the moveable cellular switching system.

3. Apparatus according to claim 1 or 2, wherein the moveable system has terminals with provision for connection of a cellular handset, and means for transferring audio signals from the cellular handset to an audio output of the terminals.

4. Apparatus according to claim 3, wherein the terminals have means for collecting ringing tone from the handset and generating a visual or audible alert in response to such ringing tone.

5. A cellular radio system having a fixed switching system for providing telephone connections for one or more cellular radio telephones, and a tracking radio link for connecting a moveable cellular switching system to the fixed cellular radio switching system, comprising registration means for responding to a control call made by a cellular radio telephone over the tracking radio link to the fixed cellular radio switching system to indicate to other switching systems that calls to a cellular radio telephone currently in the area of coverage of the moveable switching system should be initially directed to the fixed cellular radio switching system, and diversion means to cause such incoming calls to be diverted to the moveable cellular switching system by way of the tracking radio link.

6. Apparatus according to claim 1, 2, 3, 4 or 5, wherein the movable system has means for generating an association between an identity code of a destination node of the tracking radio link and an identity code of a cellular radio telephone, and means for storing the said associated identities in stores associated with the fixed and moveable cellular switching systems, thereby allowing both cellular radio switching systems to translate between the cellular radio identity and the node identity.

7. Apparatus according to claim 6, the apparatus being arranged such that calls directed to a cellular telephone currently co-operating with the moveable switching cellular system are diverted by the fixed cellular switching system to a node of the tracking radio system having the identity associated with the cellular radio identity, the node having means for connecting the call to the moveable cellular switching system and the moveable switching system having means for retrieving the cellular

network identity associated with the node and routing the call to the cellular telephone having that identity.

8. Apparatus according to claim 7, wherein the tracking radio link is a satellite link having means for changing the satellite through which it is routed, and comprising means for maintaining a call in progress when such a change is made

9. A method for providing network location functions in a fixed cellular radio switching system for one or more cellular radio telephones when said telephones are in communication with a moveable cellular radio switching system connected to the fixed cellular switching system by a tracking radio link, wherein the moveable cellular radio switching system initiates a call over the tracking radio link to the fixed cellular radio switching system in response to the detection of the presence of a cellular radio telephone in the area of coverage of the moveable switching system, and the moveable switching system and the fixed cellular radio switching system co-operate to cause calls directed to the cellular radio telephone to be transmitted to the moveable cellular switching system by way of the tracking radio link.

10. Method according to claim 9, wherein the movable system generates an association between an identity associated with a node of the tracking radio link and the cellular network identity, and the said associated identities are stored by the fixed and moveable cellular switching systems, thereby allowing translation between the cellular and tracking radio link identities by both cellular radio switching systems.

11. A method for routing calls made to a cellular radio telephone currently connected to a moveable cellular radio switching system wherein a fixed cellular radio switching system indicates that the cellular radio telephone is currently connected thereto such that calls are initially directed to the fixed cellular switching system, and wherein such calls, when received by the fixed cellular radio system, are diverted by the fixed cellular radio system to a node in a tracking radio system, the node in the tracking radio system being associated with the moveable cellular radio telephone switching system, the node then routing the call to the cellular radio telephone by means of the moveable cellular radio switching system.

12. Method according to claim 11, wherein calls directed to a cellular telephone currently associated with the moveable switching cellular system are diverted to a node of the tracking system having an identity associated with the cellular network identity, the node connects the call to the moveable cellular switching system and the moveable switching system retrieves the cellular network identity associated with the node and routes the call to the cellular telephone having that identity.

13. Method according to claim 11 or claim 12, wherein the tracking radio link is a satellite link having means for changing the satellite through which it is routed, and wherein a call in progress can be maintained when the satellite through which the tracking link is routed is changed.